

DERWENT-ACC-NO: 2002-463931  
DERWENT-WEEK: 200249  
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TITLE: Device for mask cleaning and manufacturing without  
affecting the  
exposure body

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PATENT-ASSIGNEE: NIKON CORP[NIKR]

PRIORITY-DATA: 2000JP-0391688 (December 22, 2000)

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE
PAGES	MAIN-IPC	
WO 200252345	July 4, 2002	J
035	G03F 001/08	
A1		

DESIGNATED-STATES: AE AG AL AM AT AU AZ BA BB BG BR BY BZ  
CA CH CN CO CR CU CZ D  
E DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP  
KE KG KP KR KZ LC LK  
LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL PT RO  
RU SD SE SG SI SK SL  
TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW AT BE CH CY DE DK  
EA ES FI FR GB GH GM G  
R IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZM  
ZW

APPLICATION-DATA:

PUB-NO	APPL-DESCRIPTOR	APPL-NO
APPL-DATE		
WO	N/A	2001WO-JP11170
December 20, 2001		
200252345A1		

INT-CL (IPC): G03F001/08; G03F001/14 ; H01L021/027

ABSTRACTED-PUB-NO: WO 200252345A

BASIC-ABSTRACT: NOVELTY - A device for mask cleaning

0, 2001  
200252345A1

INT-CL (IPC): G03F001/08; G03F001/14 ; H01L021/027

ABSTRACTED-PUB-NO: WO 200252345A  
BASIC-ABSTRACT: NOVELTY - A device for mask cleaning capable of efficiently cleaning reticle without affecting an exposure body part and transferring the cleaned reticle to the exposure body part without being contaminated; the method, comprising the steps of transferring the reticle (R) contained in a normal case (3) into a purge gas substitution chamber (24) to substitute the atmosphere around the reticle with a purge gas with high transmittance to exposure beam, performing an optical cleaning by the ultraviolet ray from an ultraviolet ray source (27), transferring the reticle (R) into a charging chamber (35) to load the reticle (R) air-tight into a clean case (8) in the purge gas atmosphere, and transferring the reticle (R) loaded in the clean case (8) to the exposure body part.

USE - Device for mask cleaning and manufacturing without affecting the exposure body

DESCRIPTION OF DRAWING(S) - Normal case 3

Gas substitution chamber 24

Ray source 27

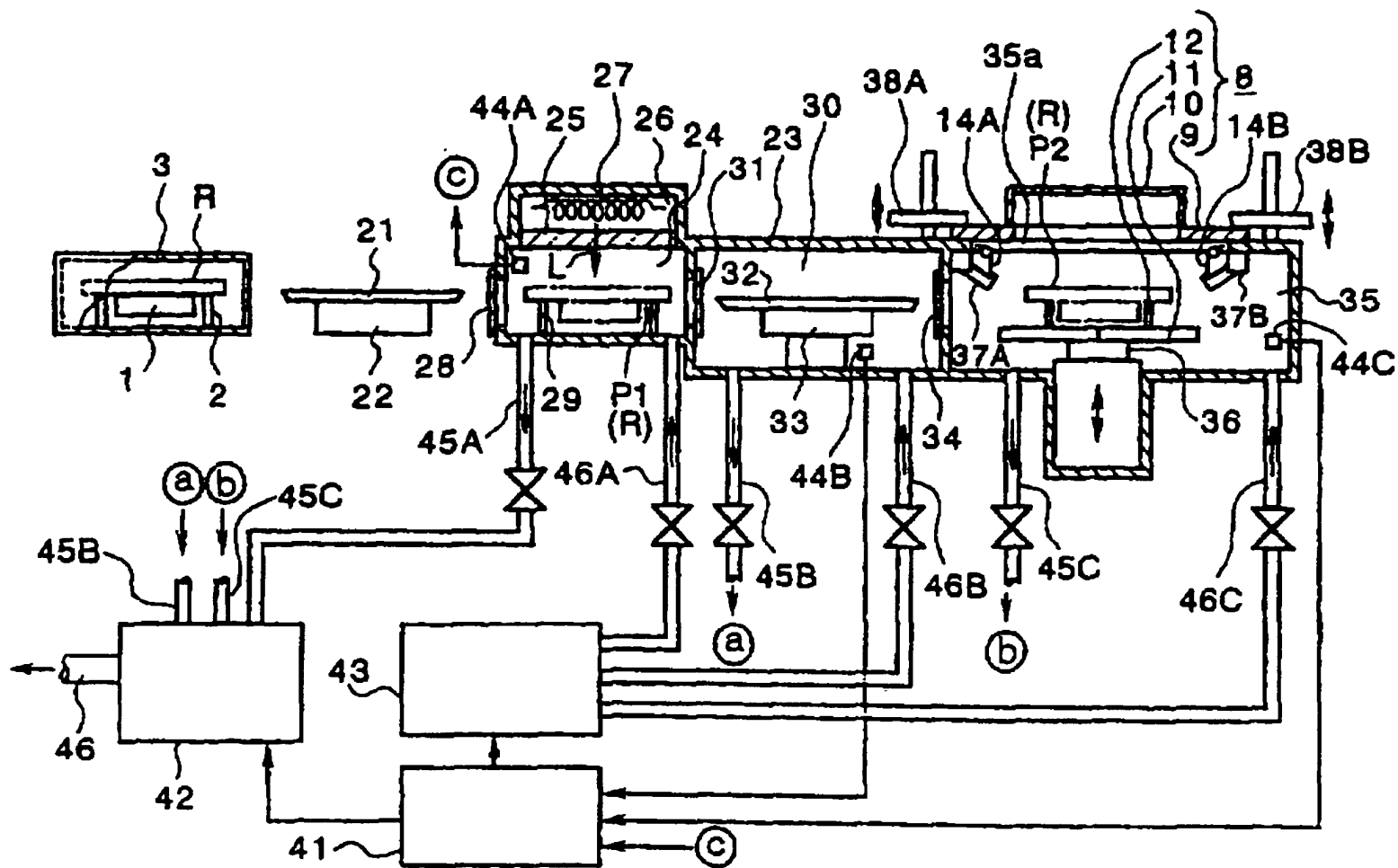
Reticle R

Charging chamber 35

Clean case 8

CHOSEN-DRAWING: Dwg.1/5

TITLE-TERMS:



	Type	L #	Hits	Search Text	DBs	Time Stamp
1	IS&R	L1	1448	(250/492.2).CCLS.	USPAT; US-PGP UB	2002/10/25 14:47
2	IS&R	L2	0	(356/FOR "102").CCLS.	USPAT; US-PGP UB	2002/10/25 14:48
3	IS&R	L3	0	(356/FOR102).CCLS.	USPAT; US-PGP UB	2002/10/25 14:48
4	IS&R	L4	0	(356/FOR.102).CCLS.	USPAT; US-PGP UB	2002/10/25 14:48
5	IS&R	L5	440	(356/239.1,239.2,239.5,239.6,239.8).CCLS.	USPAT; US-PGP UB	2002/10/25 14:49
6	BRS	L6	9	L1 and (optic\$3 near3 clean\$5)	USPAT; US-PGP UB	2002/10/25 14:52
7	BRS	L7	4	L5 and (optic\$3 near3 clean\$5)	USPAT; US-PGP UB	2002/10/25 14:56
8	BRS	L9	0	L7 and (purg\$5 near3 gas)	USPAT; US-PGP UB	2002/10/25 14:52
9	BRS	L8	1	L6 and (purg\$5 near3 gas)	USPAT; US-PGP UB	2002/10/25 14:52
10	BRS	L10	0	L7 and (maxim\$5 near3 concentration)	USPAT; US-PGP UB	2002/10/25 14:57
11	BRS	L11	0	L7 and (maxim\$5 near3 impurit\$4)	USPAT; US-PGP UB	2002/10/25 14:57
12	BRS	L12	0	L6 and (maxim\$5 near3 impurit\$4)	USPAT; US-PGP UB	2002/10/25 14:57
13	BRS	L15	2	(optic\$3 near3 clean\$4) and (purg\$4 near2 gas)	USOCR	2002/10/25 15:17

	Comments	Error Definition	Errors
1			0
2			0
3			0
4			0
5			0
6			0
7			0
8			0
9			0
10			0
11			0
12			0
13			0

	Type	L #	Hits	Search Text	DBs	Time Stamp
14	BRS	L16	62	(optic\$3 near3 clean\$4) and (purg\$4 near2 gas)	USPAT; US-PGP UB	2002/10/25 15:01
15	BRS	L14	2	(optic\$3 near3 clean\$4) and (purg\$4 near2 gas)	USOCR	2002/10/25 15:01
16	BRS	L13	6	(optic\$3 near3 clean\$4) and (purg\$4 near2 gas)	EPO; JPO; DERWEN T; IBM_TD B	2002/10/25 15:02

	Comments	Error Definition	Errors
14			0
15		Truncation overflow.	1
16			0